

FIG. 1(a)

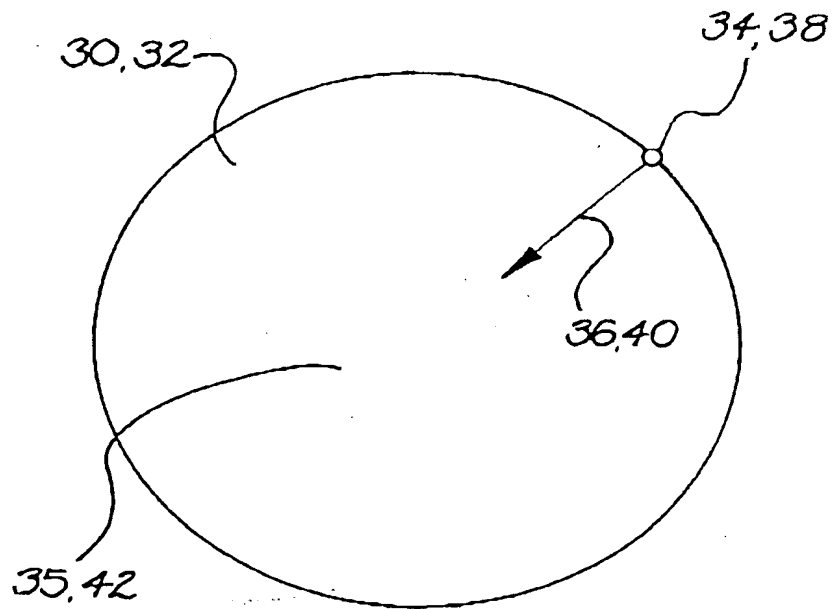
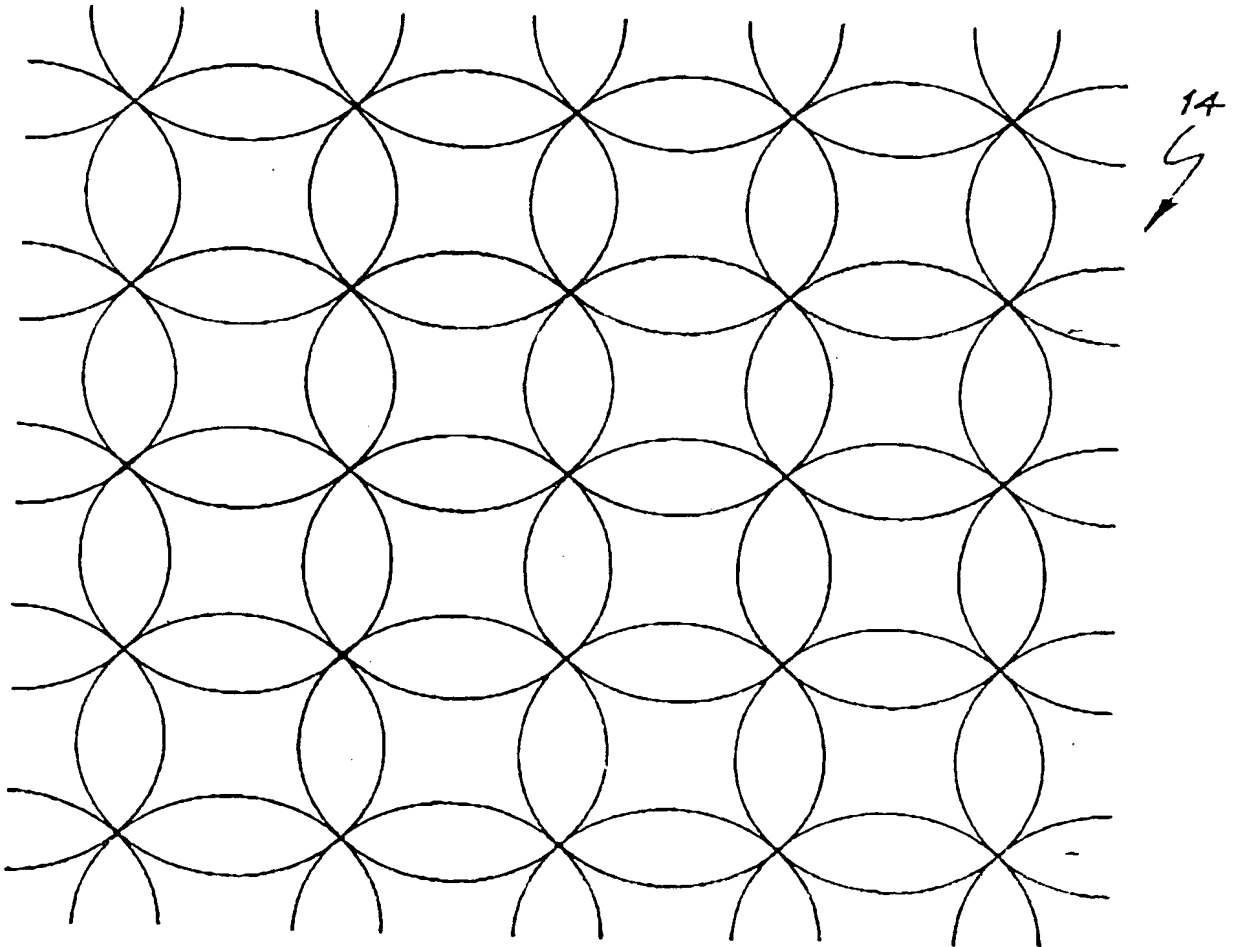
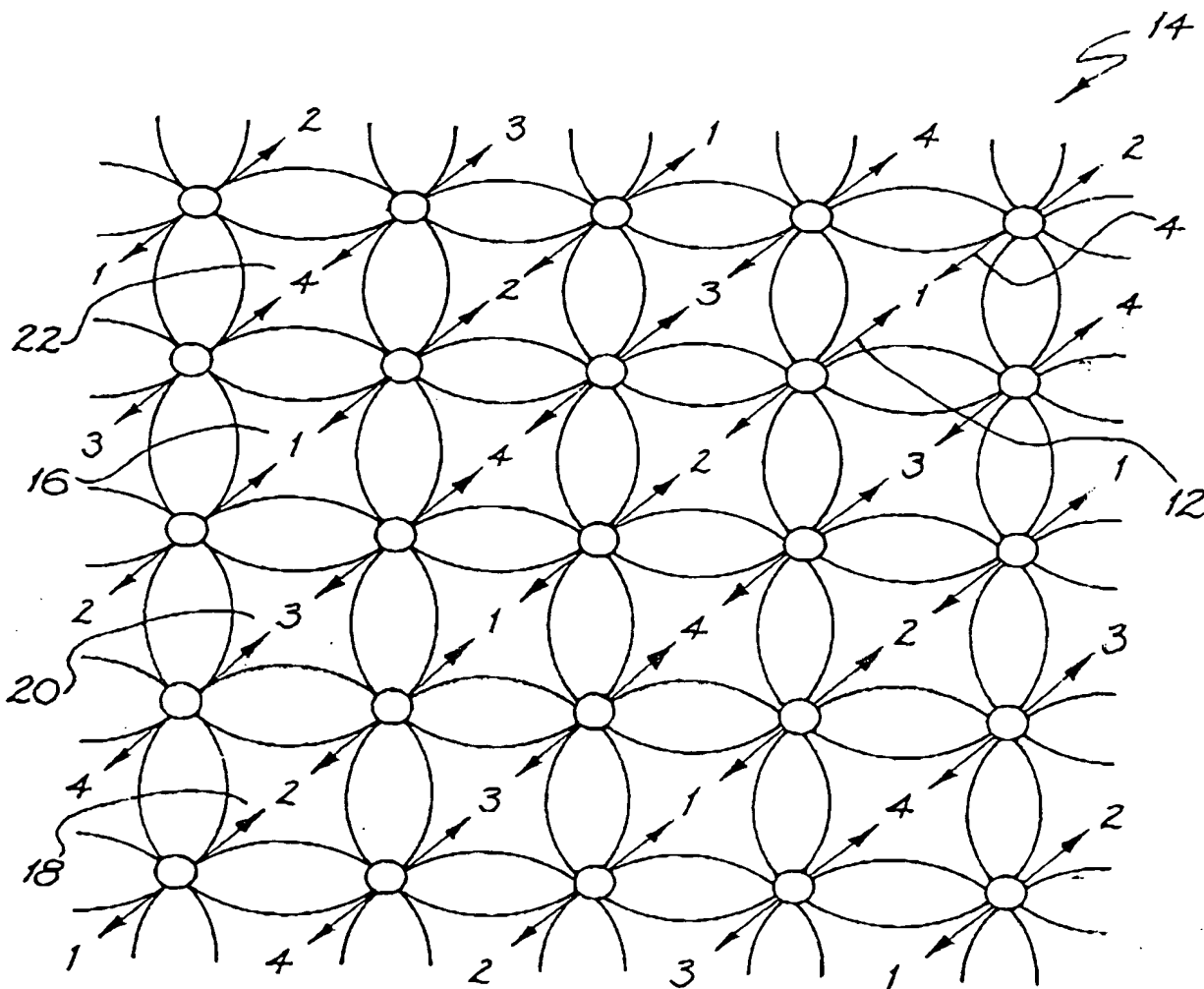


FIG. 1(b)



ARRAY OF CELLS FORMING A COVERAGE FOOTPRINT

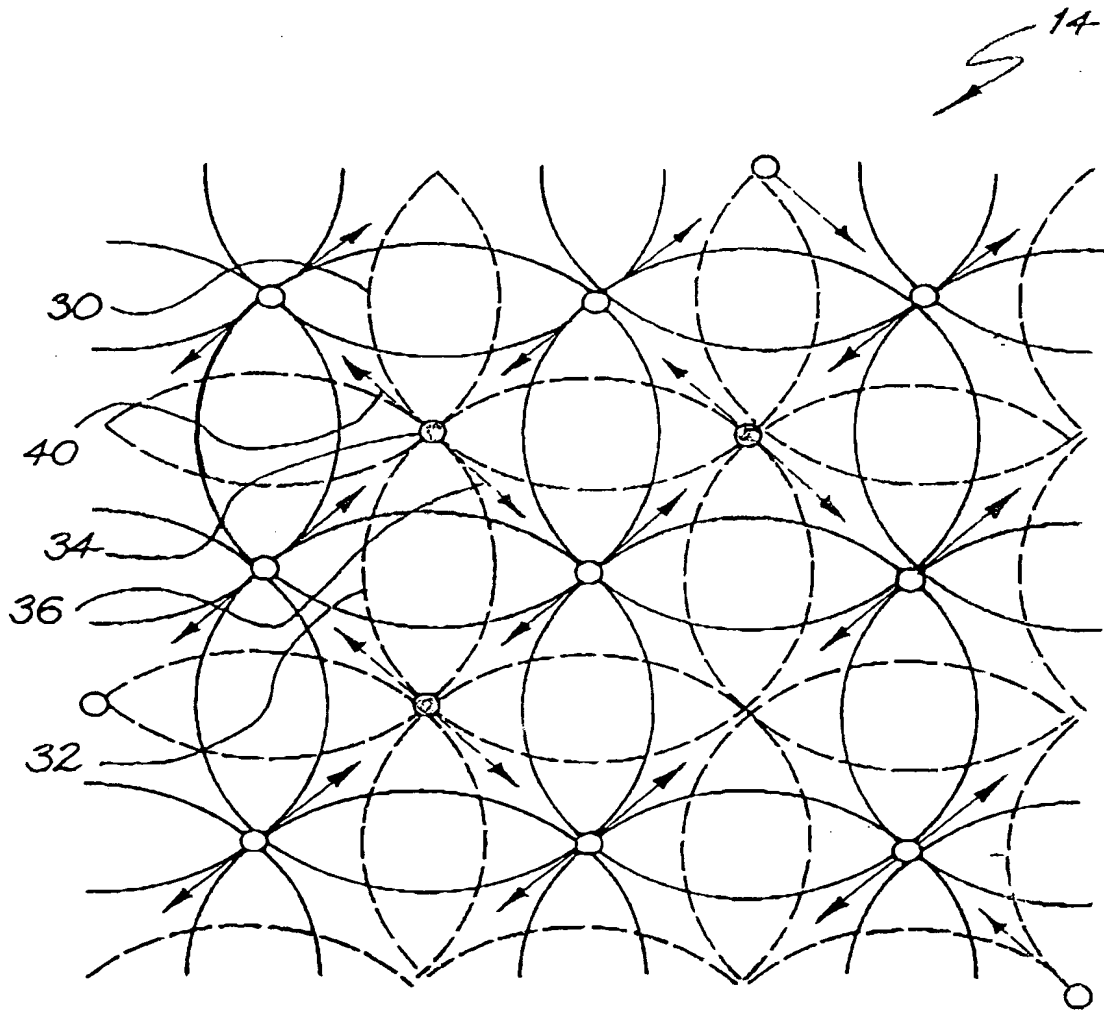
FIG. 2



BACK TO BACK EDGE FED OVERLAID FOR DUAL  
COVERAGE

CELLS SERVICED TWICE WITH SAME FREQUENCY.  
FREQUENCY SET (1,2,3,4)

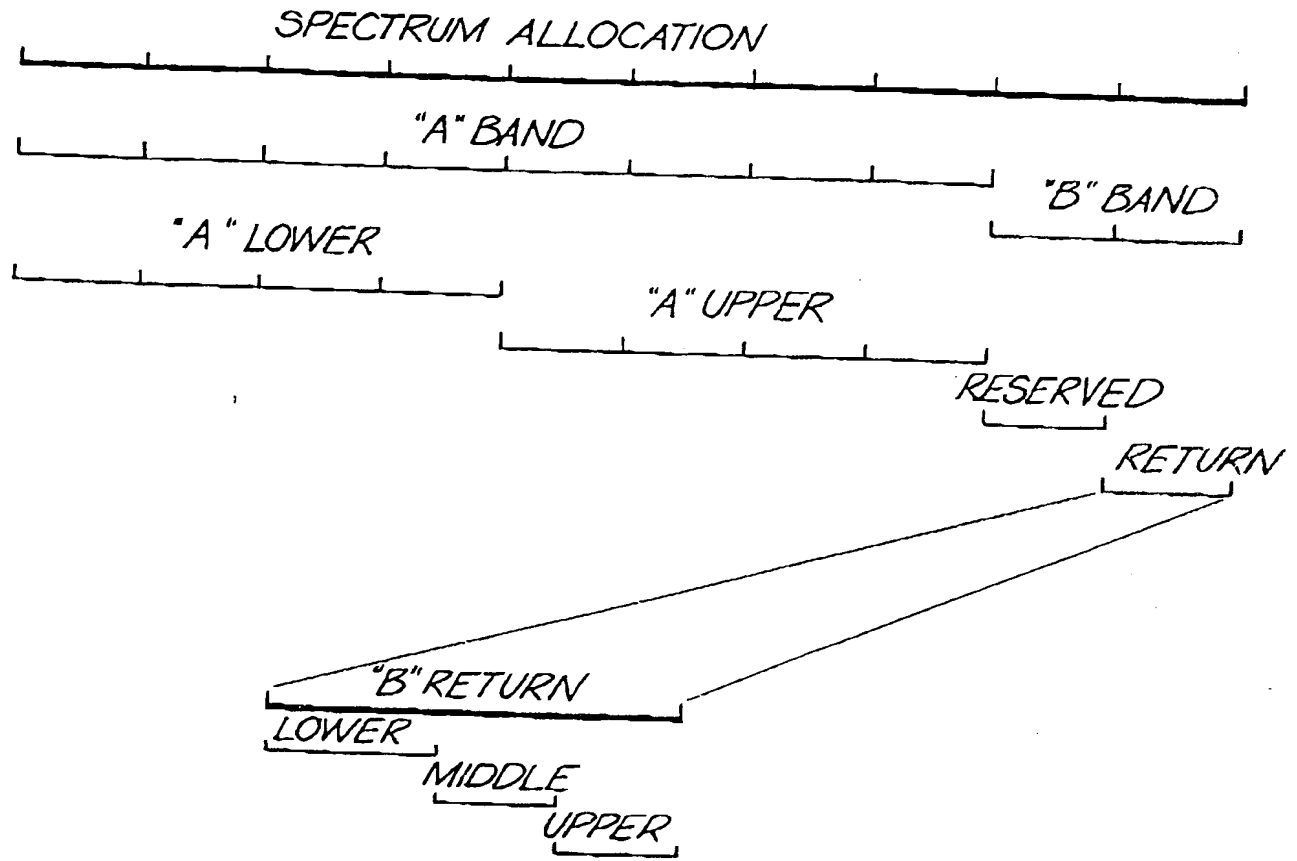
FIG. 3



ORTHOGONAL NETWORKS (BROADCAST & BROADBAND OVERLAY)



FIG. 4



TYPICAL SPECTRUM ALLOCATION

FIG. 5

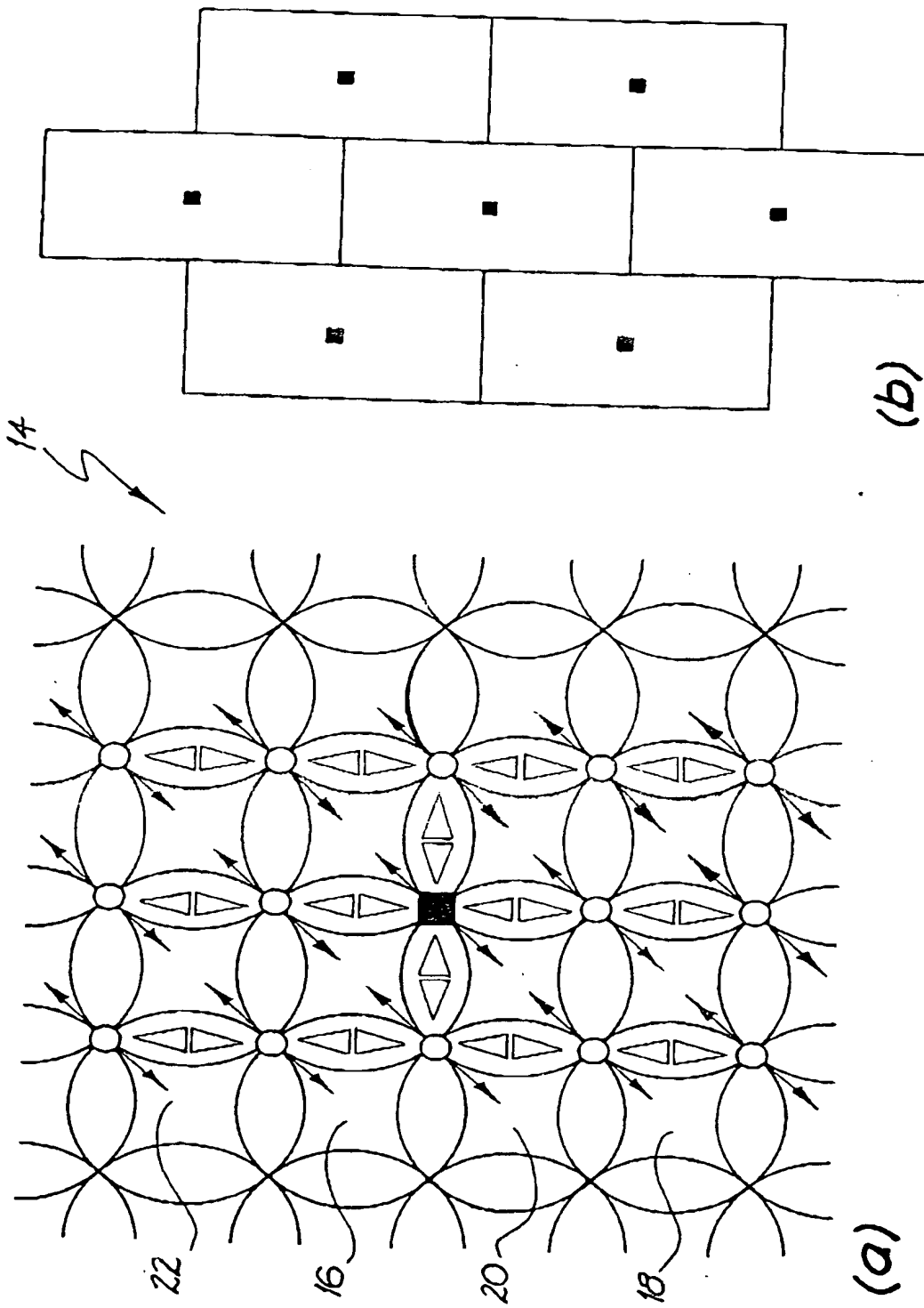
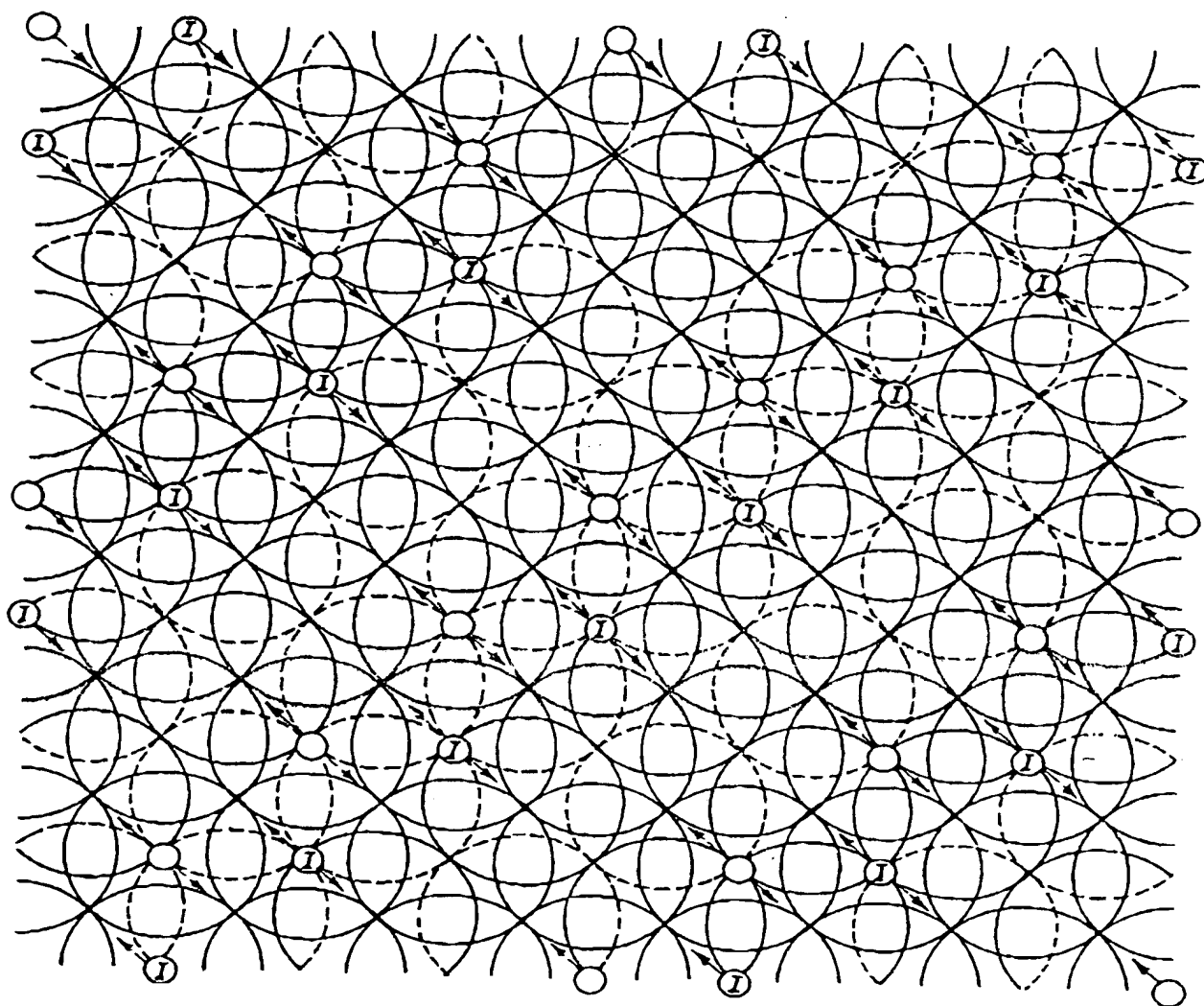


FIG. 6



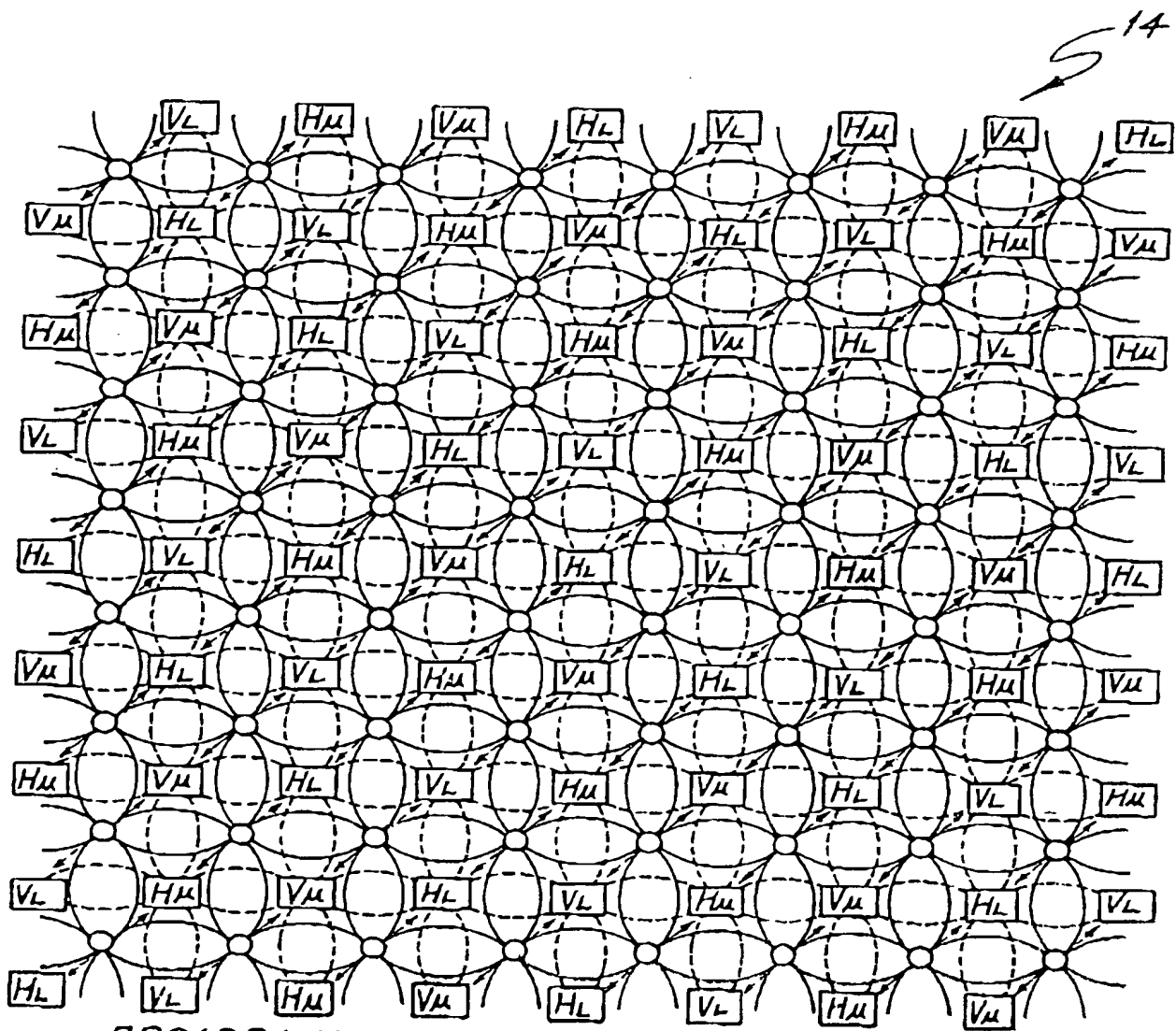
BROADCAST NETWORK (FM MODULATION)

○ VERTICAL  
POLARISATION

○ HORIZONTAL  
POLARISATION

① INDICATES HALF CHANNEL  
INTERLEAVED TRANSMISSIONS

FIG. 7

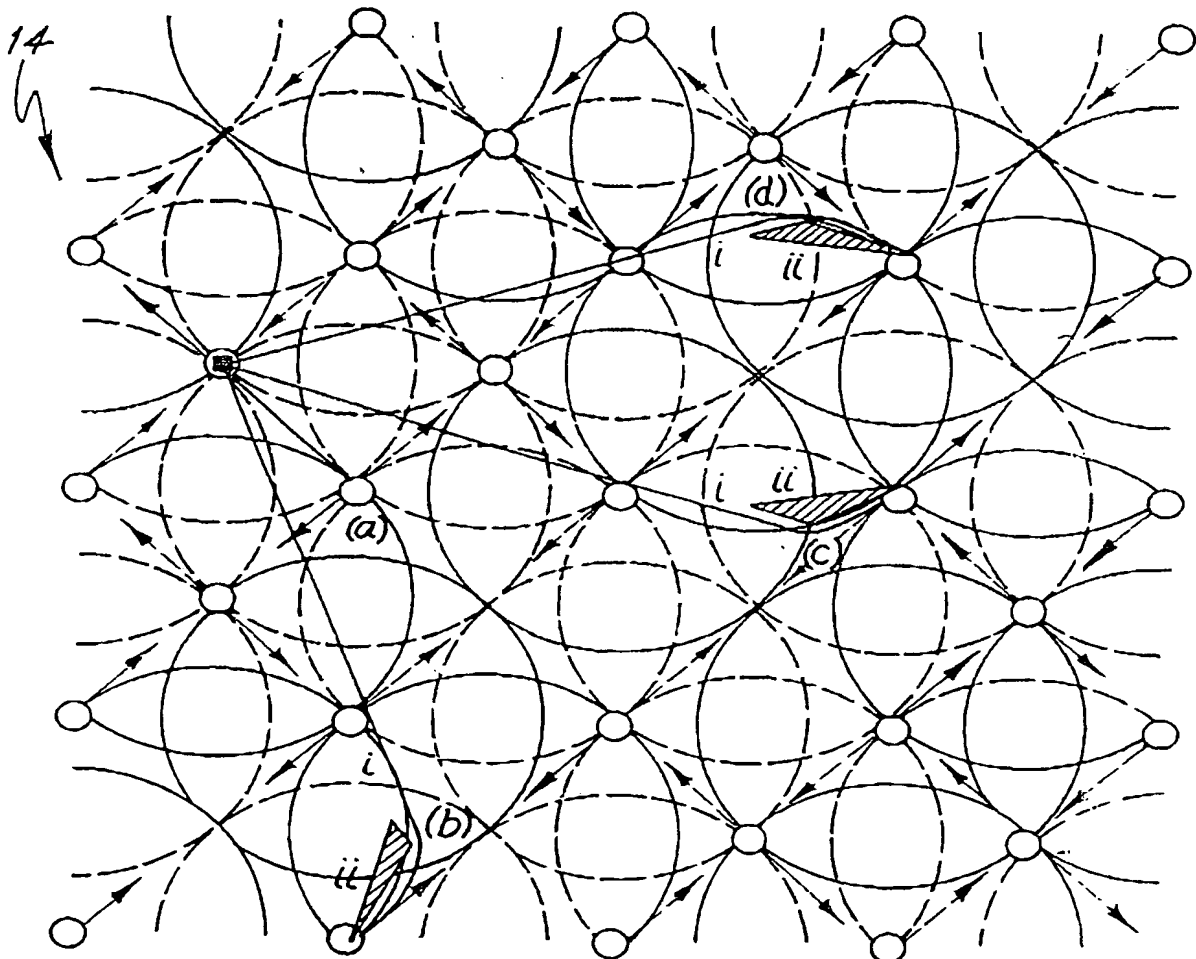


BROADBAND NETWORK (QPSK MODULATION)

$\boxed{XY}$  X POLARISATION Y 'A' BAND SEGMENT

FIG. 8

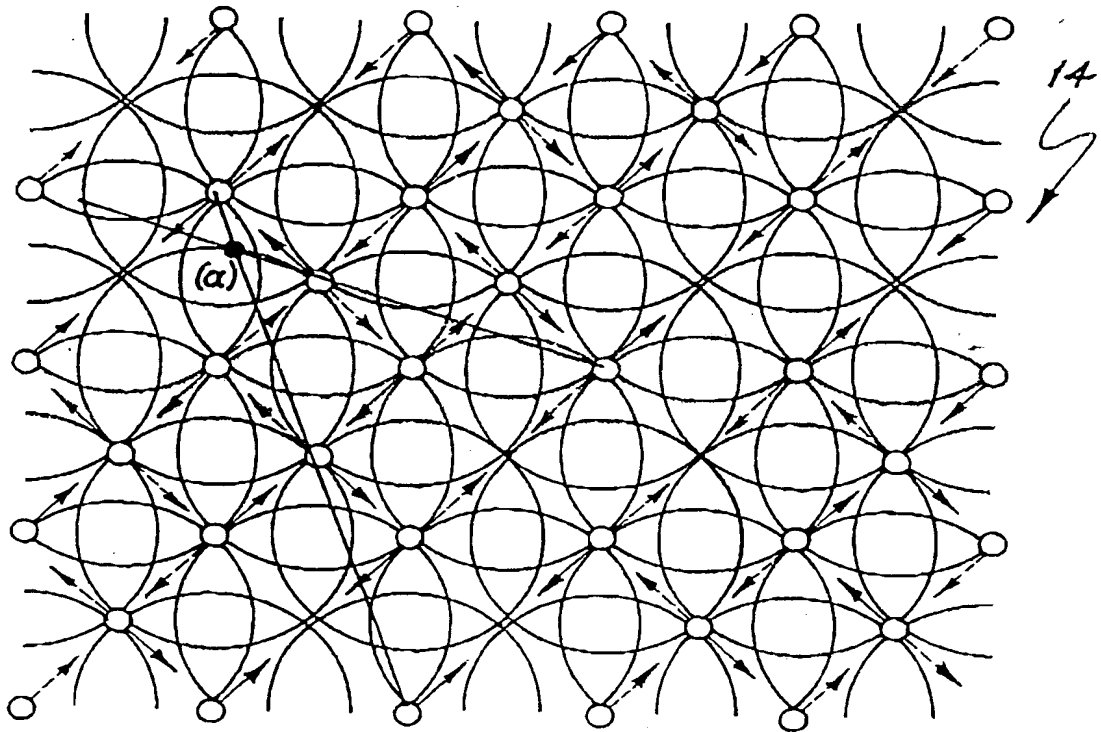




- (a) TANGENTIAL  
 (b) (c) (d) i. DISTANCE RATIO  
 ii. ALTERNATIVE PATH

BROADCAST INTERFERENCE ON BROADBAND  
 OUTBOUND

FIG. 9



(α) AT POINT (α) THE ALTERNATIVE PATH MAY ALSO BE UNAVAILABLE. IN SUCH AREAS MICRO-CELLS INFILLS COULD BE USED TO PROVIDE ACCESS TO SERVICES.

AT OTHER POINTS ALONG THE LINE OF INTERFERENCE THE ALTERNATIVE PATH MAY BE AVAILABLE IF REQUIRED.

BROADBAND OUTBOUND INTERFERENCE UPON BROADCAST.

FIG. 10

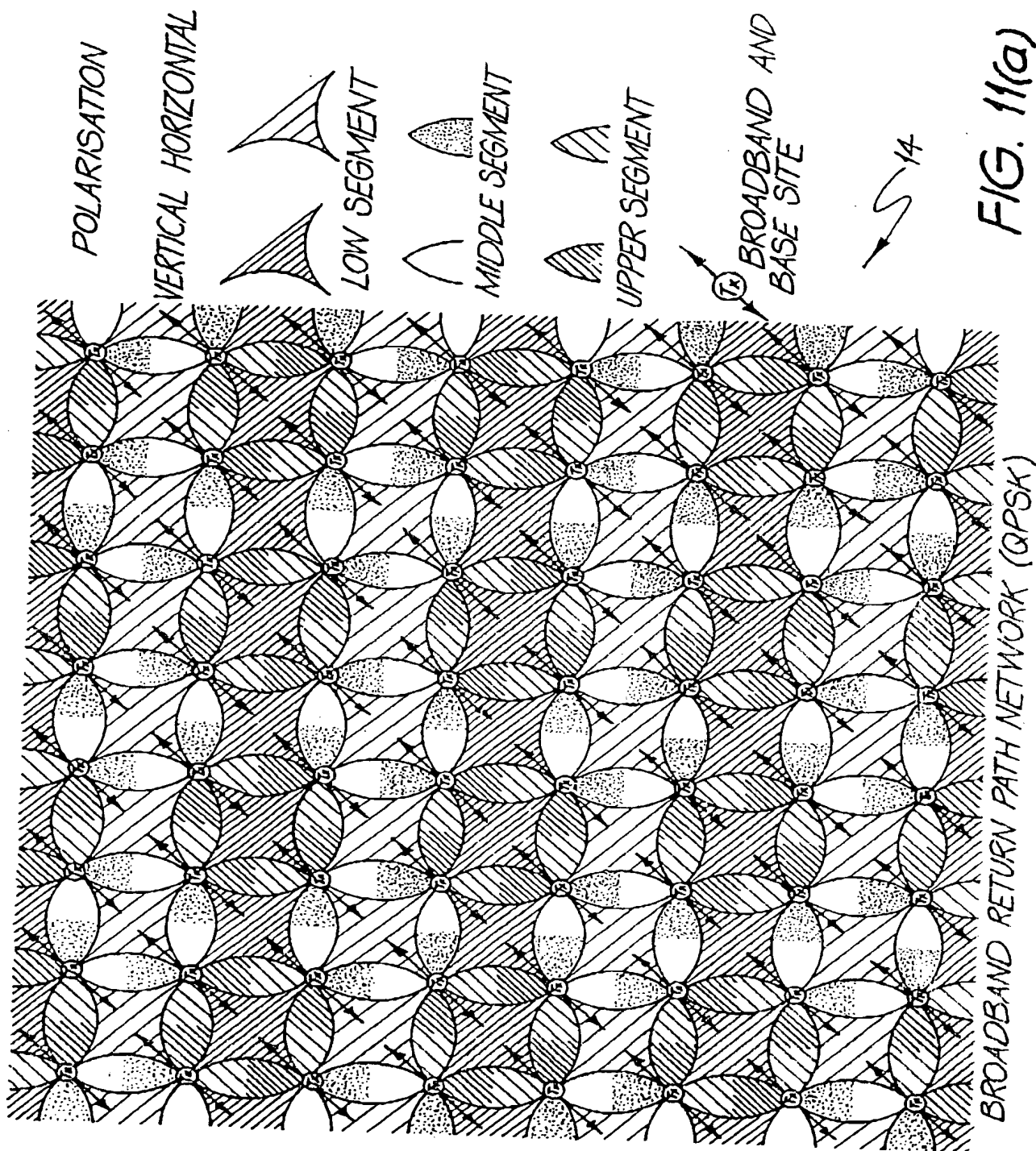
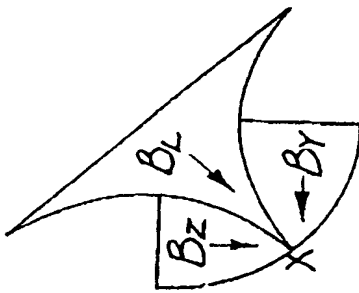


FIG. 11(a)

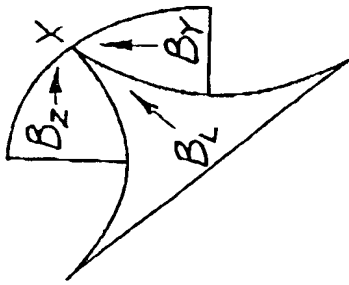


(a)

X BROADBAND BASE SITE  
 $B_y, B_z$  APPROPRIATE MEMBER OF  $B_m, B_n$  SET  
 $B_z, B_m, B_n$  SEGMENT OF 'B' BAND  
 → RETURN PATH DIRECTION INDICATOR

NOTE:

FOR A GIVEN BROADBAND BASE SITE ONLY ONE USE OF THE VERTICAL AND HORIZONTAL SET MEMBERS OF THE 'B' BAND MAY BE INCOMING. HENCE ALLOCATION FOR THE EXAMPLES (a) AND (b) ILLUSTRATED WOULD BE ON AN EXCLUSIVITY BASIS IF SITE X IS COMMON TO BOTH.



(b)

RETURN PATH TYPICAL SERVICE AREA

FIG. 11(b)

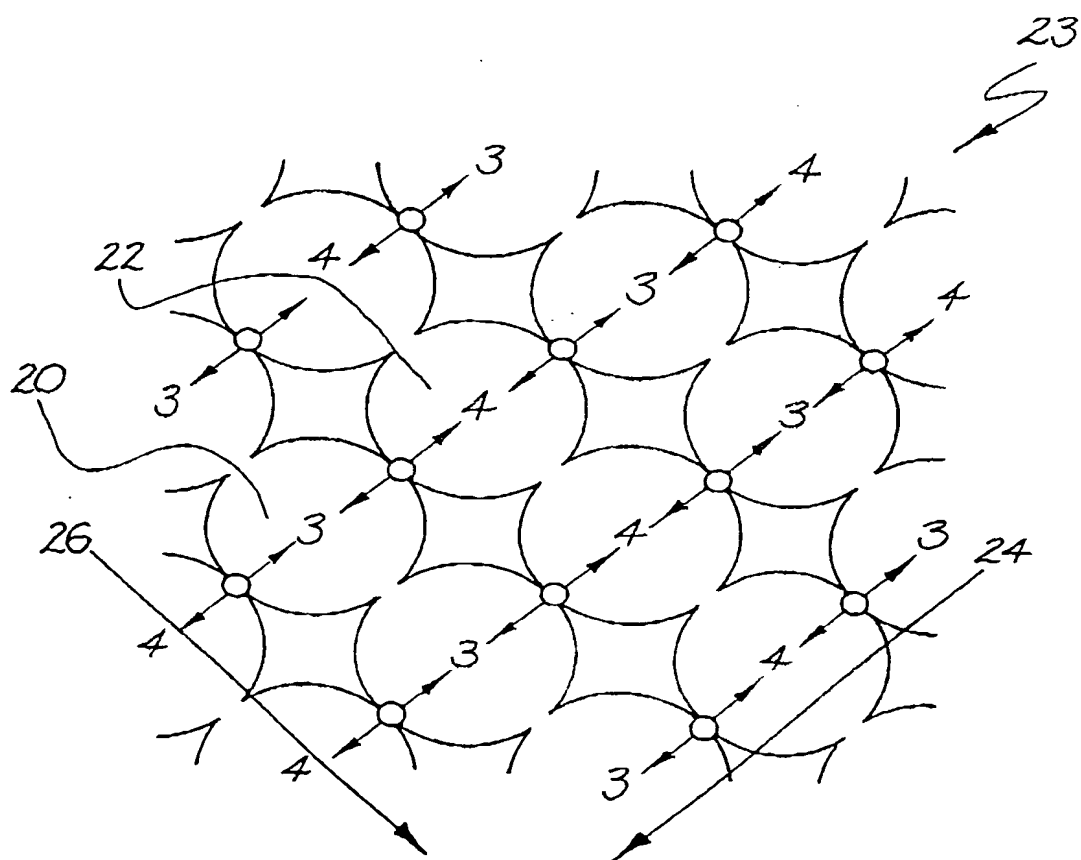


FIG. 12(a)

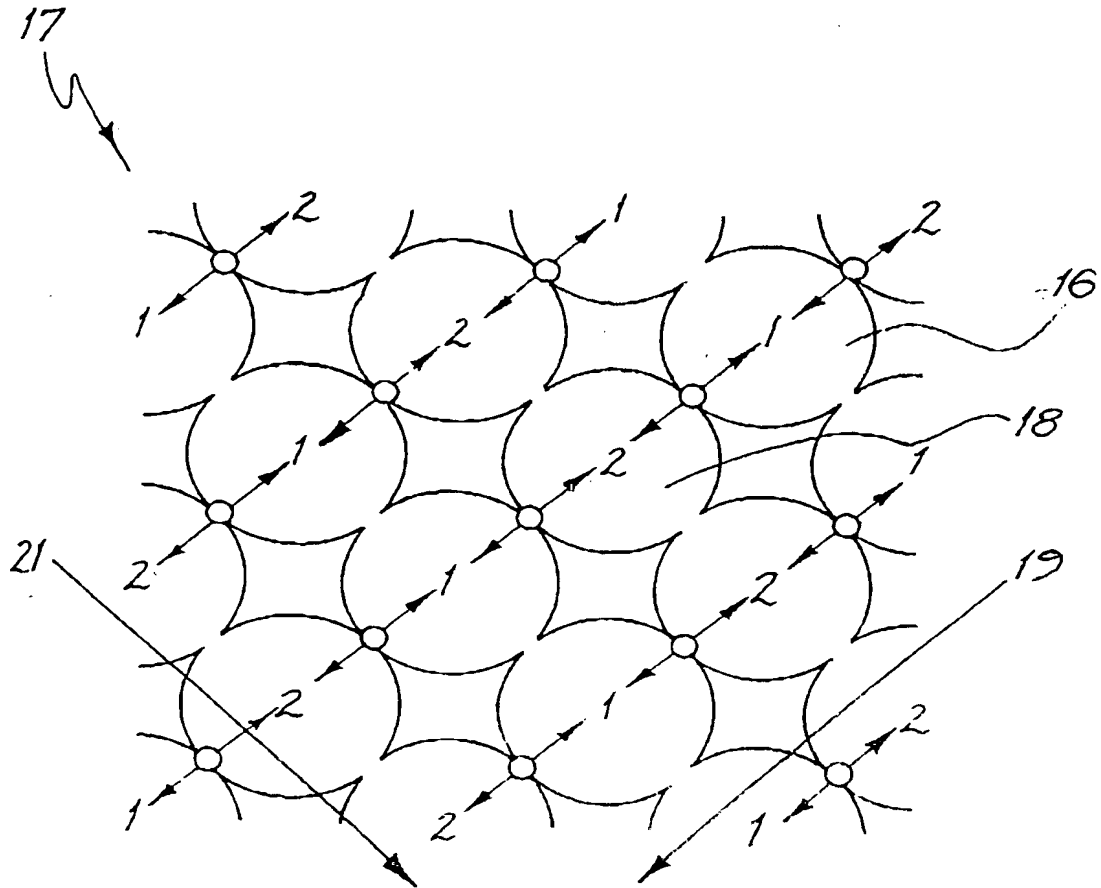


FIG. 12(b)